

FLIGHT SUMMARY REPORT

Flight Number: 97-130
Calendar/Julian Date: 24 July 1997 • 205
Sensor Package: Wild-Heerbrugg RC-10
Dual Hycon HR-732
Area(s) Covered: Mojave

Investigator(s): Stine, USGS

Aircraft #: 709

SENSOR DATA

Accession #:	05220	05221	05222
Sensor ID #:	076	020	039
Sensor Type:	RC-10	HR-732	HR-732
Focal Length:	12" 304.89 mm	24" 609 mm	24" 609 mm
Film Type:	Panatomic X Aerographic II	Aerochrome MS 2448 II	Aerochrome SO134
Filtration:	Wratten 12	HF3	Wratten 12
Spectral Band:	510-700 nm	420-700 nm	510-900 nm
f Stop:	8	16	18
Shutter Speed:	1/300	1/250	1/250
# of Frames:	11	18	18
% Overlap:	60	60	60
Quality:	Good	Excellent	Fair
Remarks:	Subtract 8 seconds for correct GMT	Subtract 9 seconds for correct GMT	Add 3 seconds for correct GMT

Airborne Science and Applications Program

The Airborne Science and Applications Program (ASAP) is supported by three ER-2 high altitude Earth Resources Survey aircraft. These aircraft are operated by the High Altitude Missions Branch at NASA-Ames Research Center, Moffett Field, California. The ER-2s are used as readily deployable high altitude sensor platforms to collect remote sensing and in situ data on earth resources, celestial phenomena, atmospheric dynamics, and oceanic processes. Additionally, these aircraft are used for electronic sensor research and development and satellite investigative support.

The ER-2s are flown from various deployment sites in support of scientific research sponsored by NASA and other federal, state, university, and industry investigators. Data are collected from deployment sites in Kansas, Texas, Virginia, Florida, and Alaska. Cooperative international scientific projects have deployed the aircraft to sites in Great Britain, Australia, Chile, and Norway.

Photographic and digital imaging sensors are flown aboard the ER-2s in support of research objectives defined by the sponsoring investigators. High resolution mapping cameras and digital multispectral imaging sensors are utilized in a variety of configurations in the ER-2s' four pressurized experiment compartments. The following provides a description of the digital multispectral sensor(s) and camera(s) used for data collection during this flight.

Camera Systems

Various camera systems and films are used for photographic data collection. Film types include high definition color infrared, natural color, and black and white emulsions. Available photographic systems are as follows:

- Wild-Heerbrugg RC-10 metric mapping camera
 - 9 x 9 inch film format
 - 6 inch focal length lens provides area coverage of 16 x 16 nautical miles from 65,000 feet
 - 12 inch focal length lens provides area coverage of 8 x 8 nautical miles from 65,000 feet
- Hycon HR-732 large scale mapping camera
 - 9 x 18 inch film format
 - 24 inch focal length lens provides area coverage of 4 x 8 nautical miles from 65,000 feet
- IRIS II Panoramic camera
 - 4.5 x 34.7 inch film format
 - 24 inch focal length lens
 - 90 degree field of view provides area coverage of 2 x 21.4 nautical miles from 65,000 feet

The U.S. Geological Survey's EROS Data Center at Sioux Falls, South Dakota serves as the archive and product distribution facility for NASA-Ames aircraft acquired photographic and digital imagery. For information regarding photography and digital data (including areas of coverage, products, and product costs) contact EROS Data Center, Customer Services, Sioux Falls, South Dakota 57198 (Telephone: 605-594-6151).

Information regarding ER-2 acquired photographic and digital data is available through the Aircraft Data Facility at Ames Research Center. For specific information regarding flight documentation, sensor parameters, and areas of coverage contact the Aircraft Data Facility, NASA-Ames Research Center, Mail Stop 240-6, Moffett Field, California 94035-1000 (Telephone: 650-604-6252).

CAMERA FLIGHT LINE DATA
FLIGHT NO. 97-130

Accession # 05220

Sensor # 076

Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - B	5057-5067	19:23:41	19:28:04	69936/21316	Minor-20% cumulus (frames 5057-5064)

CAMERA FLIGHT LINE DATA
FLIGHT NO. 97-130

Accession # 05221

Sensor # 020

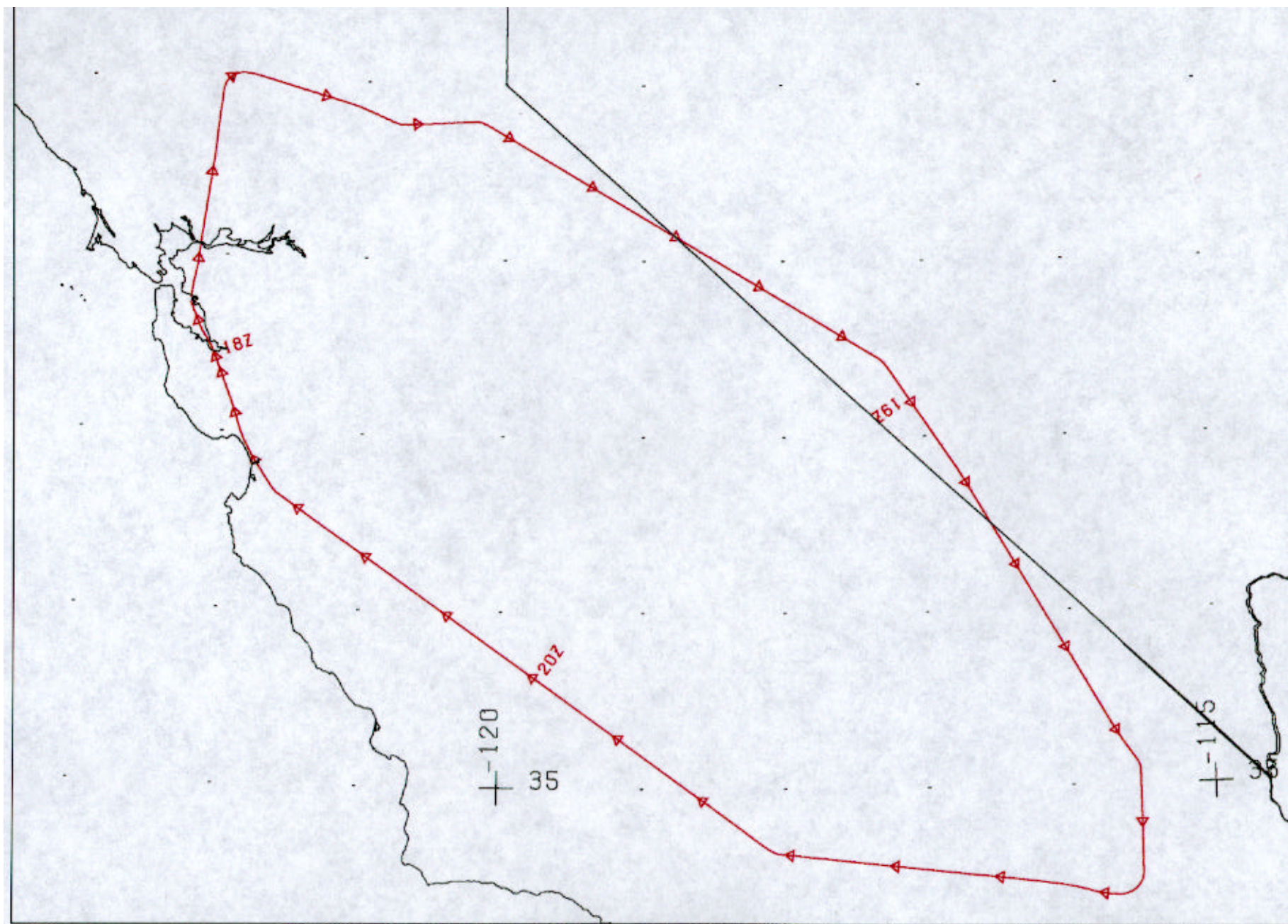
Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - B	0001-0018	19:23:47	19:27:55	69944/21319	10-30% cumulus (frames 0001-0012)

CAMERA FLIGHT LINE DATA
FLIGHT NO. 97-130

Accession # 05222

Sensor # 039

Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - B	0001-0018	19:23:35	19:27:43	69944/21319	10-30% cumulus (frames 0001-0012)

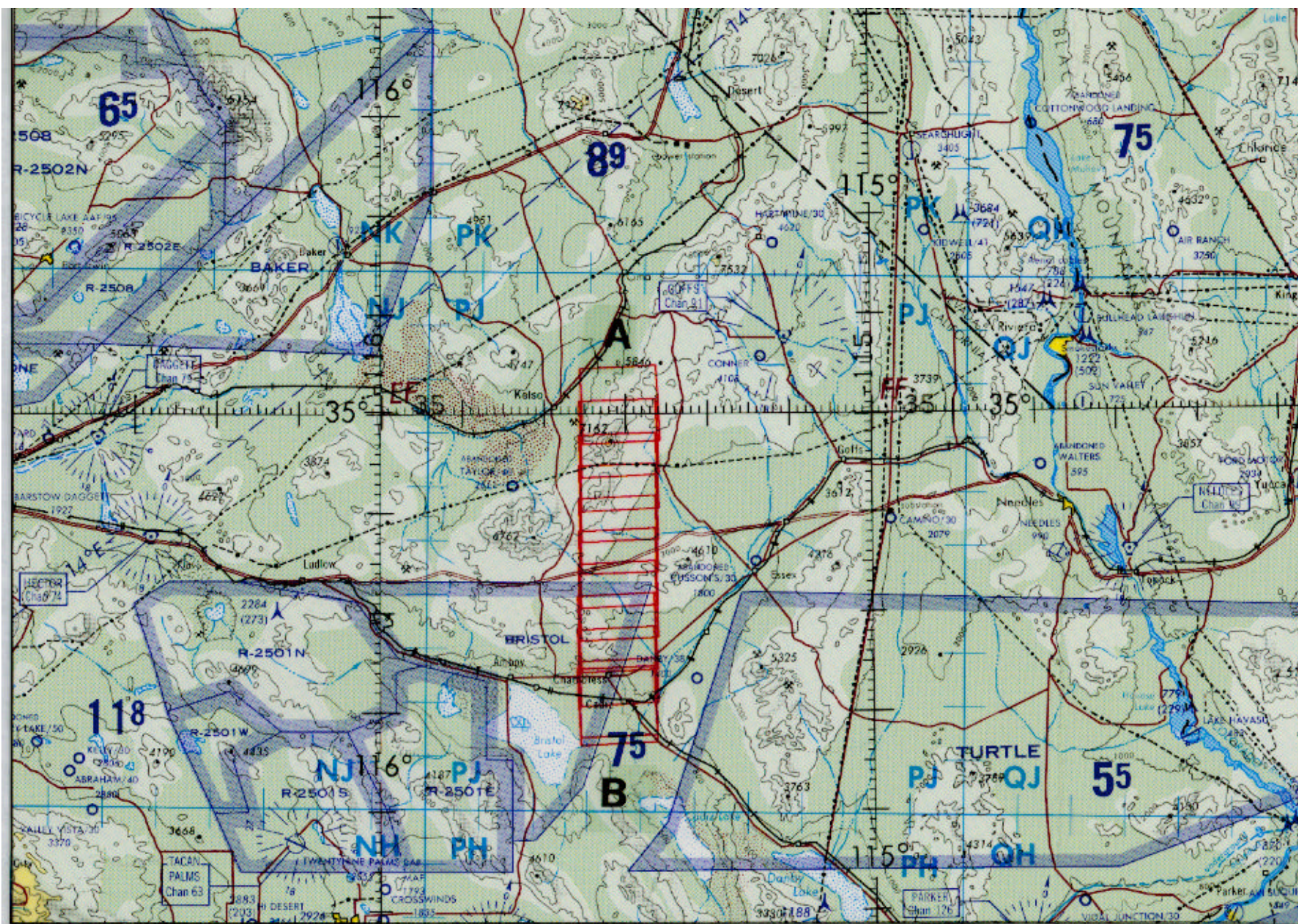


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RC-10 / HR-732



FLIGHT 97-130

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RC-10 / DUAL HR-732

DNC G-18